

# The Magazine of the Future

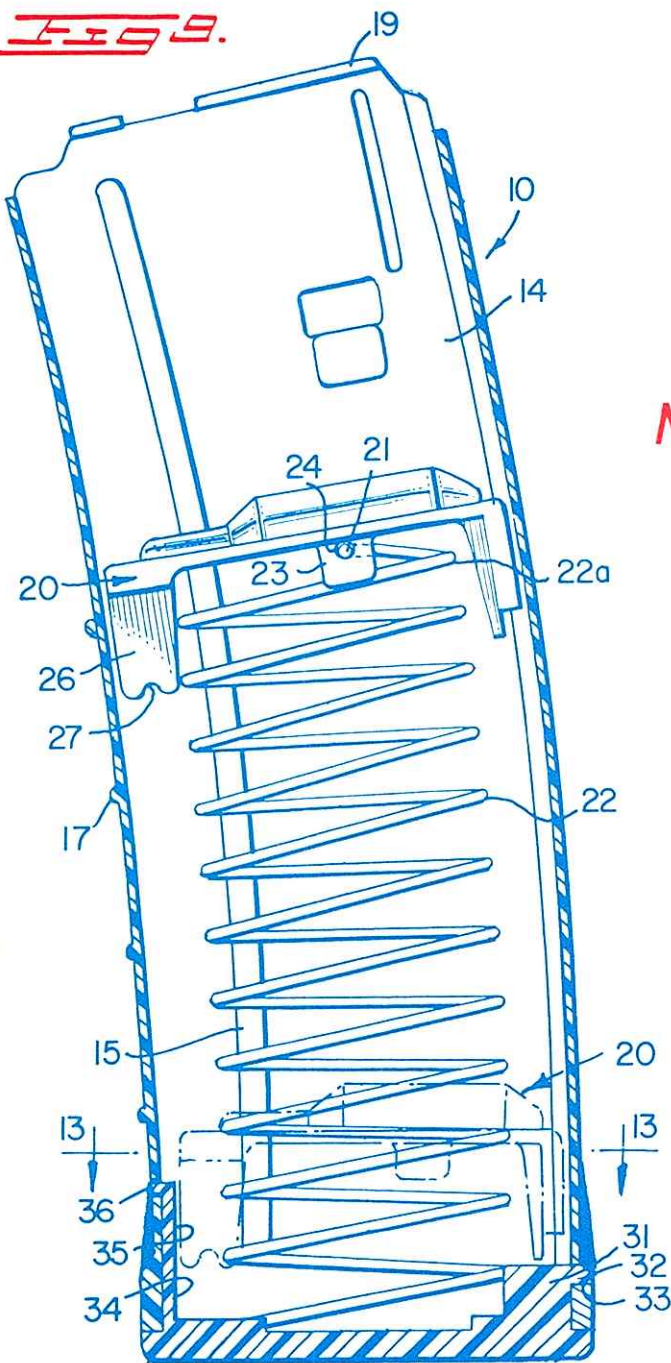


**TODAY!**

5.56 x 45 m/m — 30 Rounds



Fig 9.



**GAPCO  
NYLON  
MAGAZINE**

Fig 3

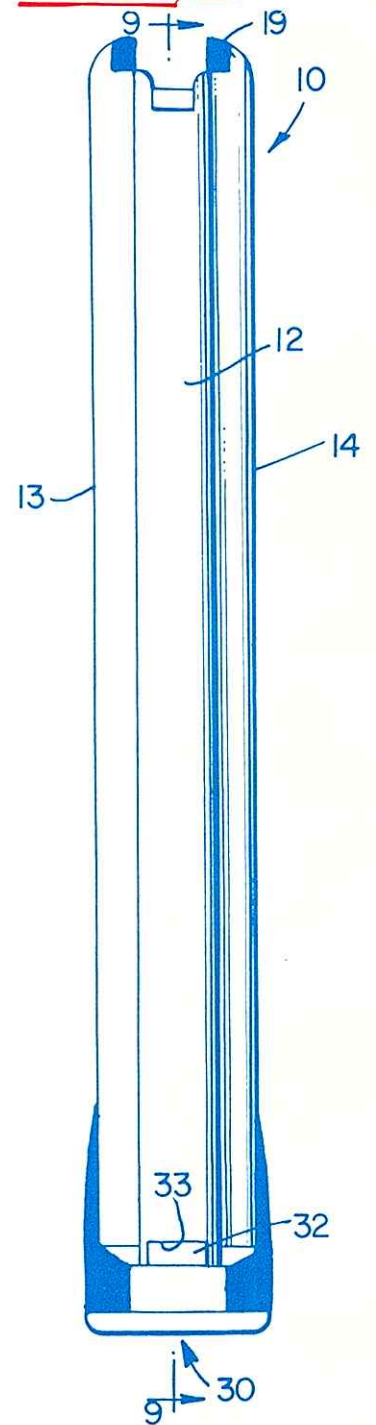


Fig 7.

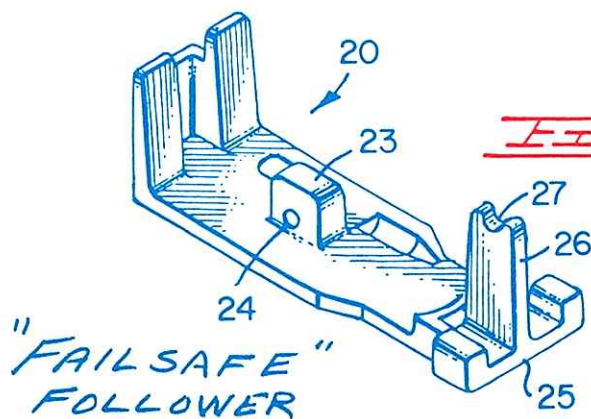
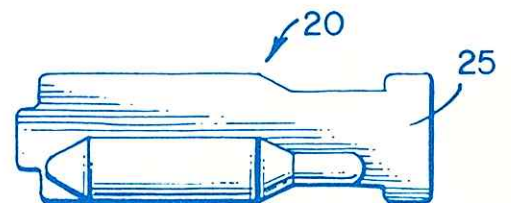


Fig 8.





**A Military Magazine is a Military Magazine . . . Correct?**

**WRONG!**

**METALLIC MAGAZINES JAM!**

They Also:

**SHINE, CORRODE, RATTLE & RUST!**

Gapco's revolutionary new Zytel® nylon magazine has patented features that eliminate malfunctions.

Gapco's Zytel® nylon magazine is far superior to any other magazine available on the market today.

**The GAPCO "Fail -Safe" follower will not jam!**

*Try it! You can jam the follower in a M16/M16A1 metallic magazine by pressing the follower down and in with your finger. NOW - try Gapco's Zytel® nylon magazine. This same motion will not cause it to jam. (See Fig. 7)*

**Another Plus . . .**

*When the magazine is fully loaded, the follower interacts with the floorplate to prevent any accidental release and loss of the floorplate. (See Fig. 9)*

**From DuPont:**

*Glass-reinforced Zytel® 77G-43L nylon is noted for its' very high strength, stiffness and toughness. It has excellent creep resistance and dimensional stability and will not "grow" under long term exposure to high heat and humidity.*

# WHY PURCHASE THE GAPCO NYLON MAGAZINE?

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*The Gapco magazine is superior to the standard metal M16/M16A1 magazines because:*

1. The patented "FAIL-SAFE" follower **will not jam**. This invention alone will revolutionize magazine design and production.
2. The GAPCO magazine is impervious to water; **it will not rust** and the DuPont Zytel® is the strongest nylon made (43% fiberglass reinforced).
3. The GAPCO magazine is also **impervious to salt water**, petroleum based products such as gasoline, lubrication oils and insect repellents.
4. The patented floorplate system, another novel part of the magazine, **positively prevents slippage** or accidental loss of the floorplate but is readily removable with a cartridge tip.
5. The patented design includes **4 reinforcing ribs** around the body, which add rigidity to the body and provides a **non-slip grip surface**.
6. The **enlarged "stop shoulder"** assures no ride-up of the magazine into the magazine well of the rifle. A **secondary stop** is incorporated in the large top reinforcing rib.
7. The inside radial surfaces (front and spine) are a **true radius**, thus assuring a perfect alignment of the cartridges in the magazine and **positive feed**.
8. The nylon material is **self-lubricating**. With both the follower and body made of Zytel®, smooth, trouble-free functioning is assured.
9. The magazine is **dent and ding resistant**. Nylon has "memory" and returns to the moulded shape. This feature prevents feedlip failure.
10. The magazine **cannot shine** from wear as the color is an integral part of the Zytel® compound.
11. Zytel® provides **less heat transfer** than conventional metallic magazines, an important consideration in automatic weapons.
12. Improved **sealed magazine catch recess** prevents entry of water and dirt into the body of the magazine. In the event of water penetration a weep hole has been incorporated in the patented floor plate.
13. This magazine **will fit** standard U.S. issue webb gear.
14. The Zytel® magazine **accepts the standard U.S. issue charging guide** to permit rapid loading of 30 rounds.
15. Although Zytel® is the best and most expensive nylon currently available, the **cost of the GAPCO Nylon magazine is considerably less than the metal magazine**



# WHY PURCHASE THE GAPCO NYLON MAGAZINE?

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*The Gapco magazine is superior to other nylon magazines, because:*

1. The patented "FAIL-SAFE" follower will not jam.
2. The patented floorplate system, another novel part of the magazine, positively prevents slippage or accidental loss of the floorplate but is readily removable with a cartridge tip.
3. It has a shoulder stop below the mag catch recess designed to prevent ride-up of the magazine into the rifle. This has been a major cause of malfunctions in the past.
4. The patented design includes 4 reinforcing ribs around the body, which add rigidity to the body and provides a non-slip grip surface.
5. The patented floorplate centers and holds the follower spring, thus assuring no slipping and no rattling.
6. It has no unnecessary holes that cause stress points in the magazine walls.
7. It is available on special order to function in both the M16/M16A1 and AR18/AR180 rifles.
8. This magazine will fit standard US issue webb gear.
9. It is made in USA under strict quality controls in a modern facility, by experienced personnel. The overall quality and superior appearance are apparent upon comparison.
10. The GAPCO magazine has a reinforced floorplate section and reinforced feed lips that combined with a tensile strength of 28,000 PSI give it very high strength, stiffness and toughness, and excellent dimensional stability.
11. The cost of the Gapco Zytel® nylon magazine is less than other nylon magazines.

## **TECHNICAL DATA:**

### **GAPCO ZYTEL® NYLON 5.56mm MAGAZINE**

The magazine body, floorplate, and follower are high pressure injection moulded of DuPont's nylon Zytel® 77G-43L.

Capacity—30 rounds, 5.56 x 45mm cartridges.

The magazine spring is the standard U.S. Military Specification anodized stainless steel spring.

### **OPTIONAL FEATURES:**

Color of nylon compound (black is standard).

Such features can be incorporated at no extra charge on orders of more than 10,000 for color change and on orders of more than 100,000 for logo or ownership markings.

### **CURRENT PRODUCTION CAPABILITIES:**

50,000 units per month

### **EXPORT PACKING:**

U.S. Military Specifications  
100 per carton (14" x 14.5" x 11")  
11.5 kg. (25.00 lbs.) per carton.

### **AVAILABLE FOR:**

M16/M16A1/AR-15  
AR18/AR180  
M16/M16A1 and AR18/AR180  
(SPECIAL ORDER)  
FN MINIMI MACHINE GUN  
FN C CARBINE


*Made in U.S.A. by*

**GAPCO**

P. O. Box 3065, Wilson, N. C. 27893  
Cable "GAPCO" Wilson, N.C.



# ZYTEL®



ZYTEL nylon resins				66 NYLONS					612 NYLONS	
PROPERTIES		Units	ASTM Method	ZYTEL 70 G-13L	ZYTEL 70 G-33L [8]	ZYTEL 70 G-43L	Modified		ZYTEL 77 G-33L	ZYTEL 77 G-43L
							ZYTEL 71 G-13L	ZYTEL 71 G-33L		
STRENGTH	Tensile Strength 73°F, Dry 50% RH 100% RH	psi	D-638	15,000 12,000 7,500	27,000 18,000 9,500	30,000 21,000 11,000	14,000 9,000 5,500	22,000 16,000 11,000	24,000 20,000 17,000	28,000 24,000 20,000
	Elongation at Break 73°F, Dry 50% RH 100% RH	%	D-638	2.1 8.1 11.4	3.0 3.6 3.1	2.3 3.3 2.7	4.0 10.8 25.8	3.4 4.1 4.8	4.5 5.0 5.5	4.0 5.0 5.0
	Shear Strength, Dry	psi	D-732	11,000	12,500	13,500	9,000	10,500	11,000	12,000
STIFFNESS AND CREEP	Flexural Modulus 73°F, Dry 50% RH 100% RH	psi	D-790	700,000 400,000 250,000	1,300,000 900,000 600,000	1,600,000 1,200,000 800,000	550,000 300,000 200,000	1,000,000 800,000 500,000	1,200,000 900,000 800,000	1,500,000 1,250,000 1,100,000
	Compressive Strength, Dry	psi	D-695	25,000	35,000	35,500	19,000	29,000	23,000	23,500
	Deformation Under Load (4,000 psi, 122°F)	%	D-621	1.1	0.8	0.7	1.7	1.3	1.0	0.5
	Deflection Temperature 264 psi (4)	°F	D-648	470	480	485	450	475	410	410
TOUGHNESS	Izod Impact Strength, Dry 1/4" bar, 73°F 1/8" bar, 73°F Unnotched 1/8" bar, 73°F	ft.lb./in. ft.lb./in.	D-2897 D-256	0.9 0.7 5.0	2.0 2.1 16.0	- 2.5 19.0	2.3 2.3 12.0	2.4 3.0 19.0	2.4 2.6 25.0	- 3.3 28.0
	Melting Point	°F	D-789	500	500	500	500	500	415	415
	Coefficient of Linear Thermal Expansion	in./in./°F	D-696	1.5x10 <sup>-5</sup>	1.3x10 <sup>-5</sup>	1.2x10 <sup>-5</sup>	1.3x10 <sup>-5</sup>	1.0x10 <sup>-5</sup>	1.3x10 <sup>-5</sup>	1.2x10 <sup>-5</sup>
ELECTRICAL	Volume Resistivity Dry 100% RH	ohm/cm	D-257	- -	5x10 <sup>15</sup> 2x10 <sup>9</sup>	- -	- -	4x10 <sup>14</sup> 3x10 <sup>9</sup>	1x10 <sup>15</sup> 3x10 <sup>12</sup>	1x10 <sup>15</sup> 2x10 <sup>12</sup>
	Dielectric Constant 10 <sup>3</sup> Hz(cps), Dry 10 <sup>3</sup> Hz(cps), 100% RH 10 <sup>6</sup> Hz(cps), Dry 10 <sup>6</sup> Hz(cps), 100% RH		D-150	- - - -	4.5 25.0 3.7 10.7	- - - -	- - - -	4.2 7.8 3.4 4.0	3.7 7.8 3.4 4.0	4.0 7.8 3.6 4.2
	Dissipation Factor 10 <sup>3</sup> Hz(cps), Dry 10 <sup>3</sup> Hz(cps), 100% RH 10 <sup>6</sup> Hz(cps), Dry 10 <sup>6</sup> Hz(cps), 100% RH		D-150	- - - -	0.020 - 0.022 -	- - - -	- - - -	0.019 - 0.018 -	0.024 0.136 0.016 0.100	0.027 0.126 0.017 0.097
	Specific Gravity		D-792	1.22	1.38	1.51	1.18	1.35	1.32	1.46
	Water Absorption 73°F/24 Hours Saturation	%	D-570	1.0 7.1	1.0 5.4	1.0 4.7	0.5 6.1	0.5 4.6	0.2 2.0	0.2 1.7
MISC.	Rockwell Hardness M, Dry M, 50% RH R, Dry R, 50% RH		D-785	95 84 122 113	101 - - -	103 - - -	82 66 117 110	96 90 122 118	- - 118 -	- - 118 -
	Taber Abrasion, 50% RH CS-17 Wheel, 1,000 g.	mg/1,000 cycles		12	14	-	34	36	-	-
	Mold Shrinkage 5"x1/2"x1/8" bar (flow direction) 2"x1/8" disc (transverse direction) Flammability (class)	mil./in. UL-94(9)		3.5 8.0 94HB	1.0 3.5 94HB	- - 94HB	4.5 11.0 94HB	1.5 5.5 94HB	3.0 9.0 94HB	2.0 8.0 94HB

"Comments about the GAPCO zytel nylon magazine in the 11th edition of *Small Arms of the World* (1977), by Edward C. Ezell, p. 566."

The past three decades have been considerable improvement in small arms magazines. Whereas nearly all World War II feed devices were made from steel, Armalite and Colt have pioneered the use of aluminum magazines to reduce total weapon weight. Considerable experimentation has been aimed at producing inexpensive magazines made of synthetics. Such magazines were developed for the M14 Rifle years ago but were not reliable enough for the Army to adopt. The Soviets too have experimented with synthetic magazines for the Kalashnikov Avtomats. Recently, GAPCO of Wilson, North Carolina, introduced a much improved 30-shot plastic magazine fabricated from DuPont Zytel, a fiber-glass-reinforced nylon resin. The GAPCO magazine has the advantage of being self-lubricating, and it contains a dye that will not fade, as the finish on aluminum magazines often does. This nylon magazine also demonstrates improved resistance to denting and bending. As Zytel claims higher resistance to temperature and humidity variations, the new GAPCO magazine may herald a new era in small arms magazine design.

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50,000 rounds fired in 5 GAPCO magazines with no appreciable wear and no malfunctions.

COLT FIREARMS CO.

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BY

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IN USA. BY

**GAPCO**

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Cable "GAPCO"  
Wilson, N.C.